

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

1. (Currently Amended) ~~A method of producing~~ An electrochemical cell,  
which contains, as electrolyte, a mechanically stable porous solid comprising one or more  
inorganic ionic components, the pores of which are filled with a liquid electrolyte,

which ~~comprises~~ is obtained by:

(i) preparing a fluid mixture comprising a first phase which includes one or more inorganic ionic components, and at least one second phase, the first phase and the second phase being essentially immiscible in the solid state,

(ii) cooling the fluid mixture to a temperature below the solidification point of both the first and second phase in order form a solid phase mixture comprising at least one first crystalline phase and second phase,

(iii) removing the second phase to provide a porous solid of the first phase, and

(iv) filling the pores of the porous solid with a liquid electrolyte.

2. (Currently Amended) The ~~method~~ electrochemical cell as claimed in claim 1,

wherein the cooling is performed under conditions such that the first phase and second phase do not segregate.

3. (Currently Amended) The ~~method~~ electrochemical cell as claimed in claim 1, wherein the fluid mixture has an essentially eutectic composition.

4. (Currently Amended) The ~~method~~ electrochemical cell as claimed in claim 1, wherein the second phase is removed in step (iii) by means of solvent extraction.

5. (Currently Amended) The ~~method~~ electrochemical cell as claimed in claim 1, wherein the second phase is a substance which is soluble in aqueous media.

6. (Currently Amended) The ~~method~~ electrochemical cell as claimed in claim 1, wherein the first phase is a water-insoluble salt.

7. (Currently Amended) The ~~method~~ electrochemical cell as claimed in claim 1, wherein the second phase is a water-soluble salt which forms a eutectic mixture with the first phase.

8. (Currently Amended) The ~~method~~ electrochemical cell as claimed in claim 1, wherein the first phase comprises AgCl and the second phase comprises an alkali metal halide.

9. (Currently Amended) The ~~method~~ electrochemical cell as claimed in claim 8, wherein the mixture is formed from 70 mol% of AgCl and 30 mol% of KCl.

10. – 16. (Canceled)

17. (Currently Amended) The ~~method~~ electrochemical cell of claim 2, wherein the cooling is at a rate of 10 to 50°C per minute.

18. (Currently Amended) A sensor which comprises an electrochemical cell as claimed in claim 1 ~~claim 11~~.

19. (Currently Amended) A sensor for the determination of gases which comprises ~~a porous solid~~ an electrochemical cell of claim 1.

20. (Canceled)

21. (Currently Amended) ~~A porous solid~~ An electrochemical cell of claim 1, wherein the first phase is of an ion-conducting material.

22. (Canceled)

23. (Currently Amended) ~~A porous solid~~ An electrochemical cell of claim 1, wherein the pores have a size in each spatial direction of about 20 nm to 5 µm.

24. (Currently Amended) ~~A porous solid~~ An electrochemical cell of claim 1, wherein the porous solid has a lamellar pore structure.

25. (Currently Amended) ~~A porous solid~~ An electrochemical cell of claim 1, wherein the porous solid has a degree of porosity of 20 to 50%.

**26. (New)** An electrolyte comprising a mechanically stable porous solid comprising one or more inorganic ionic components, the pores of which are filled with a liquid electrolyte,

which is obtained by:

(i) preparing a fluid mixture comprising a first phase which includes one or more inorganic ionic components, and at least one second phase, the first phase and the second phase being essentially immiscible in the solid state,

(ii) cooling the fluid mixture to a temperature below the solidification point of both the first and second phase in order form a solid phase mixture comprising at least one first crystalline phase and second phase,

(iii) removing the second phase to provide a porous solid of the first phase, and

(iv) filling the pores of the porous solid with a liquid electrolyte.

**27. (New)** An electrolyte of claim 26, wherein the first phase is of an ion-conducting material.

**28. (New)** A catalyst comprising a mechanically stable porous solid comprising one or more inorganic ionic components, the pores of which are filled with a liquid electrolyte, and a catalytic component,

which is prepared by a process comprising:

(i) preparing a fluid mixture comprising a first phase which includes one or more inorganic ionic components, and at least one second phase, the first phase and the second phase being essentially immiscible in the solid state,

(ii) cooling the fluid mixture to a temperature below the solidification point of both the first and second phase in order form a solid phase mixture comprising at least one first crystalline phase and second phase,

- (iii) removing the second phase to provide a porous solid of the first phase, and
- (iv) filling the pores of the porous solid with a liquid electrolyte.